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*Herefordshire* ORCHARDS,

A

PATTERN

FOR ALL

*ENGLAND.*

Written in an Epistolary ADDRESS to

SAMUEL HARTLIB, Esq;

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By *I. B.*


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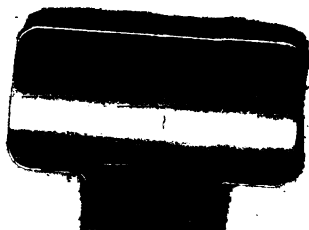
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S i R,



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Our industrious endeavours for the benefit of all Men, and particularly for the good of this Nation, hath well deserved the grateful acknowledgement of all good Men, and of my self in special; for that in my rural retirement I have received some Profit, and very much innocent and refreshing delights in the perusal of those Treatises, which are by your diligent hand communicated to the Publick.

My Education was amongst Scholars in Academies, where I spent many Years in conversing with variety of Books only. A little before our Wars began, I spent two Summers in travelling towards the South, with purpose to learn to know Men and foreign manners. Since my return, I have been constantly imploy'd in a weighty Office, by which I am not disengaged from the care of our Publick Welfare in the Peace and Prosperity of this Nation; but obliged to be the more sollicitous and tender in preserving it, and promoting it. Wherefore,

A

fore,

fore, taking notice that, this County is reputed the *Orchard of England*, and (in the generality of good Husbandry) excelleth many other places; I offer it (as my duty) to give you some plain and unpolished account of our *Agriculture in Herefordshire*; which I do the more willingly undertake, for that I do not yet know of any other address is made unto you from this Country. Here I observe the wisest and best of our Gentry to be very careful in setting forward such kind of Husbandry, as best agrees with the nature of the Soil where he inhabiteth. From the greatest Persons to the Poorest Cottager, all Habitations are encompassed with Orchards and Gardens; and in most Places our Hedges are enriched with Rows of Fruit-Trees, Pears, or Apples, Gennet-Moyles, or Crab-Trees. Of these, the Pears make a weak Drink fit for our *Hindes*, and is generally refused by our Gentry, as breeding Wind in the stomach; yet this Drink (till the Heat of Summer hath caught it) is most pleasing to the female Palate, having a relish of weak Wine mixed with Sugar. If mingled with some harsh kind of Apples, it makes a happy Mixture; and our observant House keepers know how to mix them to the best advantage. Some Pears are apt to incline the drink to be roapy, and they are known by giving a Wheyish Colour to the Liquor. I know a good Husband that cuts down and destroys such Pear-Trees from his Ground, calling them the worst of Weeds. For others are so nice as to refuse the Drink; and Women love it best, as sweetest, till it be roapy.

Most

## Orchards.

Most other kinds of Perry are of a more watery Colour, than Apple-Cyder, and more luscious. The white Horse-Pear yields a juice somewhat near to the Quality of Cyder; and the Neighbourhood of *Bosbury* is famous for a peculiar Perry, which hath many of the Masculine Qualities of Cyder. It is as quick, strong, and heady, high-coloured; and retaineth a good vigour two or three Summers, yea in great Vessels and good Cellars many Years, before it declineth. The Fruit is so hard and coarse, that a Man cannot endure to bite a Morsel of it, and a Pig will refrain it. This *Bosbury* Pear is there called the *Bareland* Pear; and as the Liquor approacheth to Apple-Cyder in colour, strength, and excelleth in durance; so the bloom cometh forth of a damask Rose Colour, like Apples, not like other Pears. Our Gennet Moyles are commonly found in Hedges, or in our worst Soil, most commonly in *Irchinfeld*, or towards *Wales*, where the Land is somewhat dry and shallow. This Fruit is nice, and apt to be discouraged by blasts, and we do ordinarily expect a failing of them every other Year, especially in dry Soil; and the Reason is apparent and necessary. But this Fruit makes the best Cyder in my judgment, and such as I do prefer before the much commended Red-streak'd. For this Gennet Moyle, if it be suffer'd to ripen upon the Tree, not to be mellow but to be yellowish and fragrant, and then to be hoarded in Heaps under Trees, a Fortnight or three Weeks before you grind them; it is (at a distance) the most fra-

grant of all Cyder-Fruit, and gives the Liquor a most delicate Perfume. So, for Tarts and Pyes, it is much commended. The Crab is commonly ground for Verjuice, and sometimes hoarded till near *December*, and then mingled with Cyder, or washings of Cyder, to make a Mordicant Cyder, which doth well please our Day-Labourers; and would surely well agree with a *French* Peasant's Palate. And, for a fresh Wonder, I assure you, that we have lately found out, that one of our most delicate kinds of Cyder is made of a kind of a Crab, called a *Bromsbery* Crab, thus hoarded; it being much like a Stomach Wine, of a very pleasing sharpness. This Experiment is not yet known to many of our Country-Men, it being reserved to few as a novel Mystery. I have sometimes try'd the Cyder of Pippins only, well ripen'd, not green Windfals, nor over-ripen'd, and somewhat hoarded; and I find it to be a very pleasant drink, and do conceive it to be the most wholesome, and most restorative of all sorts of Cyder.

I need not tell you how all our Villages, and generally all our Highways (all our Vales being thick set with Rows of Villages) are in the Spring-time sweeten'd, and beautify'd with the bloomed Trees, which continue their changeable Varieties of Ornament, till (in the end of Autumn) they fill our Garners with pleasant Fruit, and our Cellars with rich and winy Liquors. Few Cottagers, yea very few of our wealthiest Yeomen, do taste any other Drink in the Family, except at some special Festivals,  
twice

## Orchards.

15

twice or thrice in the Year, and that for Variety, rather than with choice.

Orchards being the Pride of our Country, and the Scene of my present discourse, I will offer unto you two Observations upon that Argument, as properly directive to them that can affect the Pleasure or Profit, which must needs be, in many respects, very much: As, for that they do not only sweeten, but also purify the ambient Air, (which I conceive to conduce very much to the constant Health and long Lives, for which our County hath been always famous) and for that they fence our Habitations and Walks from the stroke of Winds and Storms in the Winter, and affords us shelter and shade in the Heat of Summer; and (if I may acknowledge grateful Trifles) for that they harbour a constant Aviary of Sweet Singers, which are here retained without the charge or violence of the *Italian Wiers*.

My first Observation is this; I conceive that if other Countrys would submit to the same Patience and Industry, as is usual amongst us, they might partake of a great measure (at least) of the same Blessings. As wee see in our Borderers of *Shropshire*, *Worcestershire*, and *Glostershire*, and also in *Somersetshire*; and much more in *Kent* and *Essex*, &c. My reason I take from the wonderful difference of Soils whete we abound with rich Orchards. About *Bromyard*, a cold Air, and a shallow barren Soil, yet store of Orchards of divers kinds of spicey and savoury Apples: About *Rosse* and *Wobley*, and towards the *Hay*, a shallow, hot, sandy or stony



stony Rye-Land. and expos'd to a changeable Air from the disgusts of the Black Mountain; yet here, and all over *Irchinsfield*, and also about *Lemster*, both towards *Keinton*, and towards *Fayremile*, (which make a third difference of shallow and starving Land.) in all these barren Provinces, as good store of undeceiving Orchards, as in the richest Vale in the County, even by *Frome* Banks. Only as I fore-noted, where the dryest Fruit-Trees are planted in a very hot, shallow, and dry Soil, there we must be content with a full and certain Blessing every second Year. This being also allowed, that some Soil and some Air is more agreeable for some kind of Fruit, than for other; as for example, *Worcestershire* is more proper for Pears and Cherries, than *Herefordshire*, and *Herefordshire* more proper for Apples. The reason of the difference may in part appear by this following Illustration. Where the Turf is very shallow, the rough starvy Ground (which in this Country we wrongfully call *Marle*) hinders the tender Root of the Apple-Tree from descending deep enough for due Nourishment, and fit shelter. There (is in the Ground which we esteem the most barren) the Root of the Pear-Tree, having a more piercing vigour, breaks his way through this coarse *Marle*, as it will also cleave through some Veins of Rocks and Stones; and under this starvy Ground, it finds a more congenial and richer Nourishment; as appears by the store of Fruit, fair, and juicy, and also by the kind of the Tree, smooth, bright-coloured, and free from Moss.

**Moss.** This we also note, that in a deep Soil, that is most kind for Apples, if the Root of a Pear Tree descends deep into a soft clay Ground, the Tree spends all his Strength in growing downwards, and becomes less spacious, and less beautiful in the Head, and less fruitful. And where some Pears find great Difference of Soil, whether grafted or planted by the Stock, there it differeth sometimes in bulk, and oft times in other Qualities very much. Which seemeth to me to explain, why there is such different kinds of Pears in every Country: their Shape and their Nature, and therefore also their Names being changed so often, and so easily.

Also I have frequently noted, that the richest Cyder, and the best tasted Apples for the Table, do grow in the Soil that is less deep and less commended for other uses, as in a high Ground, or dry Land. And you shall find the better tasted Fruit to be more wretched or wrinkled, or spotted with Warts, Moles, or Freckles, or of a more Russet or yellow Colour. The other Apple that comes from the richer and lower Ground, is more pallid, more plump, but more waterish and insipid. I conclude this Observation with this Direction, That since no kind of Soil should wholly discourage us, and yet much regard must be had of fitting the Fruit to the Soil, therefore we must employ our first care in the Plantation of a Nursery, where our Experiences may daily increase, and the Plants also be educated, prepared and fitted for the neighbouring Soil.

For

For what *Columella* saith of Vines, I may as truly say of Fruit-Trees; *Quod ex longinquo petitur, parum familiaritur nostro solo venit, propter quod difficilius convalescit alienum ex terra regionis. Optimum est ergo eodem agro quo vitem dispositorus es, vel certe vicino, facere seminarium; idque multum refert loci natura, &c. de arbor. cap. i.*

My second Observation is intended to encourage the Plantation of a Nursery, by directing the sure way how to fit the Soil with the greatest variety of Fruits, and also to obtain the speediest reward, together with a Yearly delight in Novelties, and a like growth in Experiences.

But because I must now imbarke into some paradoxes, which will not easily obtain belief, and least of all amongst our own Countrymen here in *Herefordshire*, for some reasons which hereafter will occur, I will make my entrance with a plain and true Story.

Some Years ago I read a small Treatise of Orchards and Gardens written by *William Lawsons*, a North-Country Man, Printed 1626. In it I found many assertions which seemed to me so strange, so contrary to our general Opinion, so discordant from our daily Practice, and so incredible, that I could not forbear my smiles. I related the particulars to all our best Artists. Every Man confirmed me, that the Treatise was wholly ridiculous, and in no respect worthy to be examined and weighed; yet I thought I found many signs of Honesty and Integrity in the Man, a sound, clear, natural wit, and all things attested and affirm'd upon his own Experiences.

riences. This raised my Wonder the more. Amongst many particulars some were as followeth.

1. That the best way to plant an Orchard were to turn the Ground with a Spade in *February*, and to set from *February* till *May*, every Month, some Kernels of the best and soundest Apples or Pears &c. finger deep, at a Foot distance : And by removing the rest (as time and occasion should advise) to leave the likeliest Plant to reside in the natural place unremoved. *Ch. 7. pag. 17.*

2. That the Kernels of every Apple would bring forth Apples of the like kind. *Chap. 7. pag. 18.*

3. That by the Leaves of each spiring Plant you might distinguish each kind of Fruit, whether delicate or harsh, &c. *Ch. 7. pag. 18.*

5. That Apples either grafted, or any time removed, could never be sound, durable or otherwise perfect.

1. The first of these Assertions was rejected, as dilatory, and retarding our hopes and reward for half an Age.

2. The second was contradicted by daily experience, which voucheth that many Apple-Kernels will degenerate to Crabs, at least if taken from Apples planted on a Crab Stock : And that Crab-Kernels are better for a Plantation, than any Apple-Kernels.

3. The third note was wholly unknown and unobserved in our Country.

4. The fourth, like an unreasonable Phsy.

The

5. The fifth, as refuted in all our Orchards every where.

Notwithstanding these Oppositions, I still retained my good Opinion of the Man's Honesty and Experience. Therefore I resolved to make exact trial with patience. I digg'd Holes of three Foot breadth in a parcel of ordinary Clay-Ground. [Note that the whole Piece of Clay-Ground was turned somewhat deep with the Spade before, that the settlings might gather root as well in that vulgar Ground, as also in the finer Mold] I enquired slips of several Trees that grew without Graffing, and bore several Fruits of their natural kind: These I placed each kind round about the Verges of the several Holes. By diligent enquiry the first Spring I found fourteen several sorts of these natural Apples, the Fruit much differing in taste, shape, and colour; some only Green and so wrieth, some red-streaked, some party-coloured, and very pleasant, some Table-Fruit in Summer, some Winter Fruit, some Cyder Fruit, Of all these the *Kentish* Codling was by odds the worst: Not many better than the *French* Cornel. Having placed these Slips in the Border of the Hole at a Foot distance, I filled up the Hole with a fine kind of Garden Mould, carryed thither in Barrows. This I raised not in Tumps, for I foresaw the inconvenience, that it would be a Harbour for Ants and Pismires. I kept it also at an equal level, that the Rain might not lodge there, and corrupt the young Roots. In the midst of this fine Mold, in the most temperate Weather, I did  
Monthly

Monthly, from Autumn to the next Spring, set Kernels of the finest sort of Apples, with delineating in a Sciograph the several kinds in several Places. I now find that the Kernels of Apples grafted on Crab-Stocks prove not all Crabs, nor (as I guess) altogether of the kind of that Apple, whence the Kernel was taken.

2dly, That, as the Mold is finer where they first grow, so the Fruit seemeth more civil, and in coarse Ground they degenerate towards the Crab. Our Neighbours, for a Nursery, sow the dross or must (as we call it) of Apples ground in a Cyder Mill. But I have noted the fairest Kernels to be bruised in the Mill, the remainder being small, and sown in coarse Land, become a kind of Crabs.

And that the Kernels of natural Apples do very much propend to the kind of which they are descended. This was neglected, and therefore unknown to our Neighbours, who had no need of this Curiosity, as being so addicted to grafting, that they take not notice of any natural Apple, except the Genet Moyle, the Kydoddin, the Sweeting, and the *French Cornel*; which are found in all Places. 'Tis sure that Kernels of the same Apples, in a far differing Soil, do produce a different Apple; but (as I said) still with some inclination to the original, if it be the Kernel of an ungrafted Apple. And this may advertise the best Season of designing variety; namely, in application of choice Compost to the very Kernel, as *Gab. Plat.* prescribeth *Exp. 14. pag. 210.* of the Additions to the excellent Legacy. All other  
Stories

Stories, of powring liquors into the bark, or bulk of the Tree, are effete and idle Fancies, for nine days wonder.

3dly, I find the truth, and that much more might be added to *Lawsons* Rules, of distinguishing the hopefulness of the Fruit by the first Leaves of the yearling Plant. For a short and dark green Leaf prognosticateth a crabbed Fruit. With a larger Leaf and thick, but also dark green, I have found a good Winter-Apple, but the Stock hardy to endure a stiff Clay-Ground. A sady willowish broad Leaf noteth a flat, insipid Apple, as the *Kentish* Codling, which holds out well against Blasts. A paler green, as the Poppinjay, or *Barbary Leaf*, especially if the Leaf be limber also, noteth a delicate Fruit: And the broader the Leaf, the fairer that Fruit. A wrinkled Leaf, neither very dark, nor very light, proves red streak'd Crab Stocks have reddish tops. More particulars will occur by ordinary observation.

4thly, For the incredible durance of Apple-Trees, to a thousand Years, I have upon much experience and many Reasons much abated the presumption of my censure. 'Tis certainly true (as *Gabriel Plat* in the foresaid place noteth) that if a Man aim at his present profit, then grafting is his way: But if he aim at the profit of his Posterity, then it is best not to graft at all. This I add, that most ungrafted Apples are apt by the overweight of their Fruit to lean towards the Ground: And I have seen many of them quell'd quite to the Ground; where they do renew their strength, and get up again  
into

into many Trunks, in a continued order, answerable to the old Fable of the Giant *Anteus*. Every aspiring Trunk of some of these natural Apples, is much more lasting than any grafted Fruit-Tree : And many very aged People have assured me, that they have discerned no difference either of their growth or decay, in their whole Age from their Childhood. I will tell you upon my Credit the Wonders of one Tree of this kind, now growing in *Ocle Pitchard* : The Fruit is not very sappy, nor pleasant ; the Leaf dark green, and stiff. My known Friend (for tryal) made of that Tree five of our large Hogsheads, consisting of sixty four Statute Gallons of Cyder, without the mixture of any Water. It ordinarily yieldeth four Hogsheads, and seldom or (as they assure me that dwell there) never faileth of three. Yet few of our Countrymen have heard of it, or take notice of it. This Tree hath had very many uprisings, so that I conceive it hath been many hundreds of Years making this Progress. My dear Alliance, Mr. *Thomas Taylor*, was Owner of it many Years, and dwelt always in that Parish. He is now past Eighty Years old, of firm strength and fresh memory ; yet he affirmeth, that he never could discern any change in the Tree. And his Wife for many Years tried to plant the Branches, but was utterly discouraged by their slow Motion. I have for three Years tried some Branches, which seem only to keep a faint Life, with very little Progress. The Ground on which this great Tree grows, is Pasture, and seems not



in the age of Man to have been broken up, or relieved with Compost, or fresh Mold; which may shew, that it is a very hardy Plant. So much upon the adventure of mine own Credit, which may be examined by a Thousand Witnesses, to confirm the Credit, or rather guess and proposal of Mr. *Lawson*.

5thly, For duration of the Fruit-Tree, much care must be had in the removal, which should be soon after the Leaf is fallen, when the Autumnal Rains have softned the Earth at the Roots, that the Roots be not bruised or wounded in the removal: And then the Tree should keep the same position towards the Heavens; the Roots laid also in the same Posture, the smaller Fibres, or bearded Roots rather cut at the Ends, than crumpled up; and the Earth in which the Stock is laid, somewhat of the same kind, but bettered, and mellowed, not with undigested Muck, but with fine Mold, and shovelings of the Fold. If the Roots are cut or bruised, to the same proportion the Branches must be lopped. In a grafted Plant every Bow should be lopped, at the very Tops, in Apples and Pears; not in Cherries and Plums. In a natural Plant, the Bowes should not at all be lopped, but some taken off close to the Trunk; that the Root at first replantation be not engaged to maintain too many Suckers. And this must be done with such discretion, that the Top-Branches be not too close together; for the natural Plant is apt to grow spiry, and thereby fails of fruitfulness. Therefore let the reserved Branches be divided at a convenient

convenient roundness. The Branches that are cut off, may be set, and will grow, but slowly. If the Top prove spirey, or the Fruit unkind, then the due Remedy must be in grafting.

Neither is grafting to be used only as a Remedy For it doth most certainly improve the kind of the Fruit: Insomuch that a Graft of the same Fruit doth meliorate the Fruit, as is lately much observed by our *Welsh* Neighbours, who do graffe the Gennet-Moyle upon the same Stock, and thereby obtain a larger Apple, more juicy, and better for all uses: And some triplicate their Graffings (for a curiosity) upon the same account.

And it is noted amongst us, that a Pearmain or any other pleasant Fruit, either for Cyder, or for the Table, is much sweeter, if grafted upon the Stock of a Gennet-Moyle, or Kydod-din, than if grafted on a Crab-Stock; though much less lasting upon the Stock of the Gennet-Moyle: The Gennet Moyle being also less lasting, especially amongst us, where they are generally planted of large settlings, which must needs wound them in their very beginnings, and therefore hinder their duration.

Also grafting doth much precipitate, or at least expedite the Reward, especially if the Graffe be taken from a Branch that hath some Years constantly born sound Fruit plentifully. Trust not to one Year's trial. *Potest enim vel anni proventus, vel aliis de causis, etiam naturaliter infœcunda semel exuberare.: Sed ubi plurimis velut emeritis non rum stipendiis fides junculo constitit, nihil dubitandum est de fecunditate: nec tamen*  
ultra

*ultra quadriennium talis extenditur inquisitio*,  
saith *Columella* in a like case; *lib. 3. c. 6.*

1. Thus we see how to hasten the Reward both by grafting, and in the choice of the Graffe.

2. And how to sweeten the Fruit and better it, both by the choice of a pleasing Stock, and also of a kind Graffe.

3. And how to multiply variety in the diversity of Compost, especially at the first plantation of the Kernel; and I add, with frequent application of pleasant Infusions and Liquids, as in which Annis Seeds, Fennel, Rosemary, or other agreeable Aromaticks have been steeped: Yet beware of giving too much Juice to a young Plant; for that may drown it, or make it less gustful: And I never saw an Orchard prove, where the Ground was wetted with a Water-Gall, or where the Moisture did for some time lye there, and could not be drained away. Yet near a running Sink of soiled Water, I have seen the approaching Trees never fail of their Fruit.

4. And hence we see how to plant an Orchard that may probably remain to the World's end. And in this point I have insinuated some part of my Paradoxes, by the way of a Story, and in pretence of defending another against the Opinion and common practice of mine own Countrymen. Mr. *Lawson's* Book I have not now at hand, neither can I record his Judgement verbally, but I think I have stuck close to his Sense.

H

## Orchards.

17

He addeth that the Fruit of the natural Plant doth grow better and pleasanter by time, as better at Thirty Years Growth than at Twenty Years Growth. This I know not. See Chap. 7. pag. 18, 19.

Also he requireth much more distance of the Trees than we observe as Sixty Foot at least. Our common Orchards are at Twenty Foot distance; our best Orchards at Thirty at least, by alternative Rows *per quincuncem*. In large Crofts of Arable, reserved for constant Tillage, which is a necessary help to Fruit-Trees, our best Husbands graft high, and prefer *Lawson's* utmost distance, even Sixty Yards, that the Teames may not annoy the Trees; and then the Trees bear a full load of Fruit, and spread to the natural Perfection. This I add, that if you would have the Trees grow tall, and shadow more in Summer, and keep off Winds better in Winter, and the Fruit the sweeter, then you should plant the closer together, yet never nearer than Twenty Foot.

To conclude my paradoxes; He that is provided of a Nursery, need not be very nicely provident for the longevity of his Trees. A small Parcel of Ground will furnish store for all his Grounds, and for all his Neighbourhood, to play away upon Grassings and novel Experiments. And to encourage this Nursery, I now sum up all with my last paradox, that for these four last Years, whereof two were very dry Summers, I laid the fruitful sprays of natural Apple-Plants in the Ground, some very small, not two Foot above Ground, all thereabout; and from the first Summer to this present Spring, they never failed to bear as thick as

B

Traces

Traces of Onions. But it is better for the Plant, if you pull off the young Apples soon after they are knitted, the first Year at least. Some I laid also of four Yards length under the Ground, the sprays lying slope above Ground: These grow and bear incredibly. Others I slope, and pare away the bordering Turf, that the reflected Sun may give me the early benefit of a dwarf Orchard; and these, against Midsummer, are as big as a Lady's Fist. I present them to store of Witnesses. If I dwelt near *Cheapside*, I should make my new planted Nursery as rich as an Orchard. All natural Apples are not of this precocity: The more durable (as I said before) are much more fallen. Some require a knot for the Root, others not: All three the better for it. To some a small slice of the Bark is as good. Before *December*, whilst the spray grows on the Tree, by the bluntness of the Bud you may discover what Branch will bear Fruit the next Summer immediately following, if you cut off the Branch, and set it before the Buds be sprouted too far forward, (as you may in *February*, or the beginning of *March*) This (with some) will pass as a Prophecy. A fore blast or *May-Frosts* may deceive you. Of these natural Apples there are not past six or seven Kinds distinguished by proper Names amongst us. I conceive they can never be distinguished, for that every individual always assumes a peculiar Nature from the infinite variety of Compost. In this Nursery, 'tis the same pains, and no charge, to try the Seeds of *Firrs*, *Pines*, *Cyprus*, *Pitch*, &c. which prove better for replantation than in Hot-beds.

Of

Of the Art of grafting either with the Ciens, Bud, or Leaf, I shall say nothing, because every Village amongst us yieldeth store of Artifts : And many Books shew the Rules ; but in these things an Artist can teach more in a Day, than a Book in a Month.

One reason why Fruit do so abound in this Country, is, for that no Man hath of late Years built him a House, but with special regard to the proximity of some Ground fit for an Orchard, which should be of some depth, as is commonly towards the foot of a descending Ground, and frequently with a proclivity towards the South ; and the Land not too friable or hollow, but somewhat tough, binding, and tenacious, least the Winds root up the Stocks. And many times Servants when they betake to Marriage, seek out an Acre or two of Ground, which they find fit for Orchards ; for this they give a Fine, or double value for Years or Lives ; and thereon they build a Cottage, and plant an Orchard, which is all the Wealth they have for themselves, and their Posterity.

For Gardens, we have little encouragement to design more than is for the necessary use of our own Families, except our River *Wye* may be made navigable for transportation. And by defect of transportation, our Store of Cyder is become a Snare to many, who turn God's Blessings into wantonness and drunkenness. The credit of Cyder being of few late Years much advanced in the estimation of our best Gentry, who have sought out the right Method of ripening and hoarding the choicest Fruits, and of finding the right Season of drawing it, and some allo

of bottling it. But I am confident that much more may be added to the Perfection of it when they shall also apply to it the due subtilties of the mysterious Art of Fermentation.

I found it much amended, by putting pure Cyder upon the fresh Lees of a Butt of Sack, newly drawn.

In Vines our Gentry have lately contended in a profitable ambition to excel each other: So that the white Muscadel is vulgar, the purple and black Grape frequent, the Paisly Grape and Frontiniack in many hands.

Wall Nuts belong to our Highway sides, and are fittest for dry and stony Grounds. I find them for the dryest Ground of the Nursery a never failing Companion. In *Columella* we may find many excellent Rules how to ascertain and hasten their Growth, and to mend their quality.

The large Chestnut being such a masculine food for lusty Rusticks, and so much used at the best Tables in *France*, and so savoury in the condiment of our strongest Cyder with salt, I much blame our Countrymen, that we have no more use of a Food that would soon become cheap, common and lasting.

All these Nuts and Filberts do accelerate growth, (as I have proved) by the rules of *Columella*: *In aqua mulsæ, nec nimis dulci macerato, ita jucundioris saporis fructum, cum adoleverit, præbebit, & interim melius & celerius frondebit, lib. 5. cap. 10.* and again, *de arb. 22.* I cannot tell whether it should not be read, *nec nimis dulci*; but I tryed it in Milk, and also in stale Urine steep'd in sheeps Dung, with good success. He adds for an improvement, *Et in medulla*

*medulla firula sine putamine nucem Grecam vel avellanam abscondito, & ita adobruito. A worthy Person tryed the Kernels of Cherry-stones and Plum-stones, having first broken and cast away the Shells, and setting them in Summer time, as soon as they were ripe; and he assureth that they got a Years advantage in celerity.*

I do much wonder that such a singular honest Man as *Gabriel Plat* should write, that it is found by experience, that a Chesnut in ten or twelve Years will grow into a fair Tree, able to be the Master-post of a fair Building. And the like of the Wallnut, *Exp. 13. pag. 269 Addit. to the Legacy.*

I am at the like wonder at honest *Cap. Blithes* precedent of small quickset Oaks that at eleven Years growth made sparrs and small Building-Timber. *Chap. 25. pag 158. Edit. 1652.*

Our Elm is of speediest growth, all Timber, always shreadded to be the tallest of *English* Trees; and found in Rows on our Highways, and at every Cottager's Door, except they be compell'd to give place to Fruit-Trees.

In my Journeys through *Shropshire*, I have scarce seen two Elms of the right kind. The crust of the Earth there is too shallow. But the Root of the Oaks cleaves through the harder Earth, and surely finds a Marley substance for his plentiful sustenance to the full depth of his Spature,

*quod quantum vertice ad auras  
Æthereas, tantum radice ad Tartara tendit,*  
Georg. 2. vers. 191.



All our Hills have sometimes born Oaks or few failed, and I conceive most are very apt for it. But of late the Iron-Mills have devoured our Glory, and deflowered our Groves.

We are generally noted to excel in all kinds of Husbandry; our Ploughs are light, but we listen after further Directions which come to us through your hands. The Rye of *Clehangar* and of some parts of *Irchinfield* is as good as the Muncorne or Miscellane of many other Countries; and our Wheat is upon the Ground far richer than I saw any in the fair Vale of *Esome* in *Worcestershire* and *Warwickshire*, as in my Travels, I sometimes examin'd it in the Company of other more skilful Husbandmen.

For Pastures we add Improvements daily, and as a Stranger passeth by our Habitations, by our Fences, Orchards, Pastures, Arable, he may distinguish a well-ordered Housekeeper and a Freeholder, from an over-wracked Tenant, and an Unthrif.

This is the Country where *Rowland Vaughan* began his Water-works; and I can name you a great number of admirable Contrivers for the publick good.

The Lord *Scudamore* may well begin to us; a rare Example, for the well-ordering of all his Family, a great preserver of Woods against the Day of *England's* need, maintaining laudable hospitality regularly bounded with due sobriety, and always keeping able Servants to promote the best expediences of all kinds of Agriculture. And *Sr. H. L.* hath heartily prosecuted the same Encouragements. Our learned *Mr. B. H.* drives on the same Design, as far as the glances of a most sedulous Employment will

will permit. Mr. R. of L. is excellently apt, and constantly diligent in the pursuit as well of Delicacies, as Necessaries. Mr. S. of W. hath in few Years raised an under Tenement, from 8 l. yearly, and so rented, to be well worth 60 l. yearly, and so rented, or thereabouts. He never fails in any point of good Husbandry. Mr. F. of B. hath raised his poor Pastures from the value of 2 s. 6 d. to be better worth than 20 s. yearly. C. M. hath metamorphosed his Wilderness to be like the Orchards of *Alcinus*; herein also a hearty Patriot. I must cease to name Men, since in every Village there is some excellent Republican.

With one sad Note I must now conclude this discourse. I wish this fore Proverb, *Bona terra, mala gens*, may not belong to us. The most High hath filled us with his Blessings, but we fail so much in returning due Thanks, that we many times turn his Blessings into heavy Curses, and make his liberal Gifts the prevailing cause of our hasty ruin. And whereas the rural life should in all reason be the most humble, and tame, and innocent; yet daily experience sheweth, that where any Trade of Manufacture is driven on, there the Word of God bears a Price: Where Trade thrives not, there the Word of God is at the best but as a pleasant Song: If sometimes they hear it, yet seldom they obey it. And all Doors and Highways are oppressed with idle and sturdy Vagabonds: And it is more easy for an honest Justiciary to do the work of *Hercules* in cleansing the *Augaean* Stable, than to remedy such a customary and prevailing Evil. Our fresh Expectation is, that some worthy Patriot will

break through the Difficulties of an obstructive People, and force open a way for Trade and Commerce. Let our Prayers and Importunities press on all true-hearted Patriots thus to advance the Publick. For this Adventure is, without dispute, sure of a Reward in Heaven, and not only free from the envy of Men, but also always acknowledged to deserve everlasting Monuments of Glory. And thus also in the person of another (as under a fit Vail of Modesty) I briefly hint unto you, what esteem we do truly owe unto your Labours. I pray the Lord to remember your diligence in the great Day of his appearance in Glory.

May the 3d. 1656.

Your hearty Well-wisher, and obliged Servant in the Lord, I. B.

S I R,

**H**AVING employed one Day upon a long Letter to you concerning Orchards and the Culture of *Herefordshire*, and the Messenger being not yet gone, I shall now add somewhat, or at least summ up the result of my former Discourse.

The Ground for an Orchard should rather incline towards the South than towards the North; Yet no necessity of niceness in that point. They prove well towards the North. So rather towards the rising Sun, than towards the West. Yet the West Wind is the best, and the Western Sun best ripening. And the Blasts commonly come from the full South, and about Noon: Wherefore we pray with the Psalmist

mist, to be delivered from the evil that flieth at Noontide.

Yet a diligent observer may find that the hurtful Winds are apt to gather into Channels upon the surface of the Earth, as the Streams of Water do: And a Man may find by his Eye and Reason, and see it confirmed by anniverfary experience, that at a Mile's distance one point of the Heavens is far more agreeable, or hurtful than another, either by the conduct of Hills and Vales in the Neighbourhood, or at a distance, or by Vapours arising from Lakes, Rivers, or Moorish Grounds which by Frosts are turned into Blasts For we have confirmed it into a Proverb, that dry Frosts do not blast but moist Frosts and Frosts following after Rain do; and dampy Grounds make Frosts that would be dry in other Places, become moist in the Neighbourhood. Also sometimes in a very bottom the Air is penn'd so close, and the Sun's heat so multiplyed by Reflections, that it is apt, to gather the Southern-Blasts (which, as I said, are the more frequent, and more hurtful to the nicer Fruit, and to Hops) as in a Furnace or Oven.

If the Crust, or richer Surface of the Earth be near a Foot deep, it is fully enough: And if the Crust of the Earth be deeper, yet I have seldom seen any of our Stocks set more than a Foot deep, except they be great Stocks, which should keep their former depth.

If the Ground be equable, that is, in any proclivity relating towards a level, then it is pity to Stock it with natural Plants. The more expedite way were in *October* to settle Crab-Stocks at thirty Foot distance in the forementioned best order, *per quincuncem*: And after three Years, the

the next following Spring, send for an Artist to graft them with the best Fruit.

The Crab-Stocks should not be above the bigness of a Man's Handwrist: If bigger, 'tis less apt to close with the Graft, and then the Rain finds a Hole, to the danger of the Stock. Our usual Custom was, upon the plain Stock to set two or three Grafts, which (for variety) might be different, without any hazard or damage. Of late many do slope the Stock for one only Graft, conceiving this the more certain way to unite the Stock, and graff fully and speedily. In a Nursery, if the Stocks be as small as Twigs, the surest and speediest way is by the Joint-Graft, where no less than eight sides are engaged, and this is an Improvement of the last Stamp.

We cannot trust to any Artist, but have need to use a true and careful Friend in the choice of Grafts from the fruitful Branch of a sound and fruitful Tree. And an Error in this Point (besides the mistake of the Fruit) may prorogue the reward for five Years or more, which is a sad loss. *Collumella's* former Note is worthy to be remembred in this point.

If the Ground be very unequal, 'tis a great Charge, and a very gross Vanity to level it. For there is a kind of Beauty, and a sure Refreshment in a Wilderness; at least it is a good Soil if appendant to a pleasant Garden. And it may be better, more kind, and more fruitful, most certainly more fit for varitety, and for all change of Seasons by inequality, than by equality. And this is the Ground that is fittest for the natural Apple, who is then wronged, maimed, or wounded, when he is hindered from  
his

his natural coarse, or forced into order. Yet I should not plant him in such Bottoms, where the Water cannot pass away: The descent were best for his situation.

The Apples we commend for Grafts, are the *Stockin Apple*, the *Jellyflower Apple*, the *Well-Apple*, the *Eliot*, the *Queen-Crab*, the *Quince-Apple*, the *Winter-Quining*, the *Harvey*, the *William*, the *Leonard*, the *John-Apple*, the *Snouting*, not forgetting the *Pearmain*, and *Pippin*, and *Leather-Coat*. These, and many more that are nameless, are for the Table.

For Cyder the *Streak'd Must* is most commended; but 'tis but a kind of Shrub or Hedge-Plant, not apt to grow to a large Tree, and spending Strength so thick and so constantly, that the Planter commonly survives to see the decay of his own Work. There is a white Must, much commended for strong lusty Cyder, the Tree long lasting. Another white Must hath this Fault; they abide not on the Tree, to be gathered together, but are always dropping one after another.

I need not note such Cautions as may afford choice for all Seasons, early and late, and in the first stocking of the Ground to plant Pears and Apples alternately, at least if we have no certainty of the nature of the Ground; and there is a Beauty as well as Profit in variety: and Pears grow long before they take up much room, and for the most part begin to be in Perfection, when the grafted Apple is decay'd. Or a Winter Apple, which lasts longer, and grows slower, may be alternative to a Cyder-Apple.

The

The Clay-Land binds the Tree faster from Wind-Strokes, the Sandy-Land hasteneth the growth more. By Rows of Elms every Orchard and Village is generally fenced from the North and North-East Wind; y<sup>t</sup> no necessity.

For Hops, we make haste to be the chief Hop-Masters in *England*; our Country having store of Coppice-Woods, and many provident Men within these three Years planting abundance of the fairest and largest sort of Hops. All about *Bromyard* in a base Soil there is great store. At first we adventured only upon deep, low, rich and moorish Grounds; now we climb up the Hills with wonderful success. We find also that the Bottoms are apt to gather Heat as an Oven, (as is above said) and that begets Honey-Dews, when the more open Air escapes it.

Our Poets new and old, and all best Judgments do highly commend the pleasure of a Grove, *Horat. 12. Epist. 2. Scriptorum chorus omnis amat Nemus, & fugit urbes.* We do commonly devise a shadowy Walk from our Gardens through our Orchards (which is the richest, sweetest, and most embellish'd Grove) into our Coppice Woods or Timber Woods. Thus we approach the resemblance of Paradise, which God with his own perfect Hand had appropriated for the delight of his innocent Mankind. If a Gap lyes in the way between our Orchard and Coppice we fill up the vacancy with the artificial help of a Hop-Yard, where a busy Weed gives the shape of a Wood. This must content us, till we can gain the Credit of a Vineyard, which as yet hangs between hope and fear. The late dry Summers did swell us with hopes; the latter fickle Spring and  
moist

moist Autumn did blast, or drown our expectation.

Some sow Acorns, and Ash-keys, and other Seeds for Woods, in wilde and hilly Grounds. Others count it much better to plant Quick-sets, which make more haste, and may be more reducible to the beauty of order.

Before we adventure for Woods upon untryed Ground, 'tis not amiss to make use of *Sr. Hugh Plat's* Augur. My self having bought a small Tenement, thought it worth the while to see the nature of mine own Land for nine Foot depth, which was soon done. By that I found where Sand, where Stone, and where Marl of the best sort were nearest at hands : I found the reason why one piece of Arable was more cold and moist, and less fruitful than another.

We have a belief, that the most barren surface hath the richest entrails, not only of metallick Mineral, but also of Stone, yea of Marl, or some other rich material. And this is certain, that which we esteem the richest Land, and buy it at the dearest rate by far, that is in many respects the poorest Land : As for example, our richest Land is esteemed to be on *Frome* Banks, the Pasture very rich, the Arable a stiff Clay bearing the best Wheat ; yet this Clay is very unkind for Gardens, it does devour much Compost. It is a slow Ground for Orchards ; the Arable is much inclinable to the Mildews : If we have need to turn it into Pastures, though we have great advantages of Land floods, or other fat Waters, and the Ground seem very likely for Pasture, yet it is almost as good to give it away, as to go about to turn it into Pasture



sture. I have seen that in Twenty Years it gathers not a Turf, or Sward. Yea lately, the want of Winter-floods two Years together left the Pastures as bare, hard, starvy, chapt and cheany, as the basest Land upon the *Welsh* Mountains. And if the Arable be there once out of heart, or miss of one course of plowing, it is costly work to recover it.

On the contrary, in many Places of the hot Rye-Land, where the Pastures have a coarse Sea-green Blade, or short and poor, and where the Fields refuse Wheat, Pease, and Fitches, there Sheep thrive best, and their Dung suddenly recovers the Arable, which is light and easy for a weak Team: In three or four Years 'tis at the best for such Pasture as it proves. The Pastures quickly improved by fattening Sheep there, that may lye upon it Night and Day. The Land quick for Orchards, or any sort of Trees, as well the tallest Elms, as the Ash; easily fitted for Gardens, for Hemp, Flax, Turneps, Parsnips, &c. Hence you may judge which of these were more worthy to be called the richer Land: If the rich Water-floods did not give the rich Pastures the advantage on one side. And hence you may see what prevalency there is in the advantage of Pasture only.

I have seldom seen Pastures forced by Compost in this Country, as I have seen it elsewhere. Only in the Winter we feed our Cattel on the higher Pastures, and in the hazzard of a rot, some follow the Directions of *Gabriel Plats*, in putting out their Sheep all Nights; which hath proved a Safeguard to the Sheep, and a great help to the Pasture. Other helps of Pasture we do omit, every rill of Water is carefully conducted

conducted to the best use. If it runs from a fat Stream, Land-flood, or Lime-stone, we find benefit in it, if withal we let it pass over and away, before it exchangeth it's fatness in to a cold hunger, which falls out in a very few Days. Some Water we find so hungry, that we dare not receive it, but at Seasons of necessity. Lime we have seldom tryed upon Pasture. Ashes we find excellent to beget the white and purple Honeysuckle, if sifted on the Ground in *February*, till it hath half candied the Ground, like a Hoar-Frost. Our best *English* Hay-seed is by experience found to be our more natural Friend.

Our Grassiers, which are Butchers, do find this fault in the excellent Pastures stored with Gilt-cups, which is a kind of Crowfoot, that it makes the fat of their Beef turn yellow, as if it were of an old Beef.

The Honey-suckle and Grass we sort for Cows, the sower for the Breed of young Cattel, the harder and stronger for labouring Oxen; and if it be rough, and little better than Sheep-Pasture, 'tis the better for Horses, to mend the Breed of them for the Saddle. In an hyperbolic excess, for the fuller illustration, I may say, that a Nag fed upon high Grounds and dry Grounds is, for travel, as much beyond a Nag I bred in the lower Meadows, as a Lion exceedeth a Cow in activity. For a bag to Market, or a Cart, you may breed them in in the lower Meadows, and you shall see them big-limb'd, well-truss'd, and apt to tire themselves with their own bulk and weight. The other that are bred on dry Ground, are Airy and Sinewy, full of Spirits and Vigour, in shape

if I should undertake it, having no one old exemplar upon which I should frame my conjecture, at the best Success, I should shew more Wit than Honesty. For I hold it a most pernicious Presumption, to intrude our own Phantries instead of such great Authorities.

*Page 25. line 23.* The Latine may be untranslated, being but a rational inference, to authorize that which is there said in *English*.

*Page 27. line 9.* *To the World's End.* I use these Words in a vulgar Sense. For in very Truth, and well-grounded Theology, we have no reason to conceive it to be long now, before the World shall be changed or consumed by the last Fire.

*Pag. 28. line 5.* To explain this *per Quincuncem* to the dullest, we may add these *English* Words; as in a Diaper-Napkin, or in common Glass-Windows, which is the rhombular Figure.

I dare adventure to use no more than the first Letters of some Mens Names, least I have blame for my good meaning. As in this I have merited little, so I expect no better reward; yet you have very much obliged me ever to subscribe,

Yours unfeignedly  
*I. B.*

To my very worthy Friend

*F I N I S.*